

CLAIMS

1. Milling procedure to be carried out on the bone, cartilage or other patient tissue in order to form a cavity of a shape and size that allows it to house an implant or prosthesis or for other purposes in which a cavity needs to be formed, with said procedure being based on the repeated application of various rotating milling tools on the tissue until the required cavity is formed, with said procedure comprising an intermediate phase in which the depth, width and other main features of the cavity are defined and an optional countersinking phase in which the mouth of the cavity is widened, wherein:

- the tools used during the intermediate and countersinking phases are operated at low speeds ranging between 20 and 80 rpm;
- during the intermediate phase, the countersinking phase, or both, the tissue particles displaced or extracted as a result of the milling process are collected for subsequent use in other surgical processes, the recovery of the tissue is not being dependent on the use of suction machines and being based on that the tissue displaced or extracted during the milling process is housed in the milling tool as a result of the retentive design of the tool, so that when the tool is taken out these particles are extracted from it and can be used or stored as appropriate for other surgical uses.

2. Milling procedure according to claim 1 wherein the tools used in the initial phase are operated at low speeds ranging between 20 and 80 rpm.

3. Milling procedure according to claims 1 or 2 wherein no irrigation solution is applied on the tools, the loose tissue particles or the tissue surrounding the mill hole or cavity during the low-speed milling process.

4. Milling procedure according to claim 1 wherein the tissue particles collected during the milling process are mixed with PRGF (Plasma Rich in Growth Factors in accordance with WO0044314) or with other biological materials for desirable medical purposes.

5 5. Milling tools to be used in a milling procedure to be performed on bone, cartilage or other tissue in order to form a cavity of a shape and size that allows it to house an implant or for other purposes in which a cavity needs to be formed, with said milling tools being predominantly longitudinal tools that comprise an area featuring spiral grooves, wherein tissue retention zones are formed between the spiral grooves in order to store the tissue extracted during the milling process.

10 6. Milling tools according to claim 5 wherein the spiral of the spiral grooves is formed at an angle of inclination of between 25 and 40 degrees in relation to the longitudinal axis of the milling tool.

15 7. Milling tools according to claim 5 wherein the retention zones are concave or curved inwards so that when seen in a cross-section said curvature or concavity forms approximately the shape of a semi circumference.

20 8. Milling tools according to claim 5 wherein the tools feature one or more visible horizontal marks, formed in relief or in another appropriate form, to serve as a guidance during the milling process.